I claim:

1.   A method for generating a 2D view of a 3D model, said 3D model comprising at least one object, said method comprising, for at least one object of said 3D model, the steps of:

-     testing whether or not a predefined 2D representation of said object is available for said 2D view,

-     if said 2D representation is available, using this 2D representation in said 2D view, and

-     if said 2D representation is not available, calculating a 2D projection of said object and using this 2D projection in said 2D view.

2.   A method according to claim 1, wherein said predefined 2D representation of said object is a symbolic representation of said object.

3.   The method of claim 1, wherein the kind of said 2D view to be generated is taken into account when testing whether or not said predefined 2D representation of said object is present.

4.   The method of claim 1, wherein lines of said predefined 2D representation of said object are suppressed in said 2D view in so far as said lines are hidden by said object or by other objects of said 3D model, wherein the classification of a line as hidden or visible takes place depending on at least one criterion taken of the group of criteria comprising the kind of said object and the kind of said 2D view and properties of other objects in said 3D model.

5.   The method according to claim 1, wherein lines of said object or of other objects of said 3D model are suppressed in said 2D view in so far as said lines are hidden by said predefined 2D representation of said object, wherein the classification of a line as hidden or

visible takes place depending on at least one criterion taken from the group of criteria comprising the kind of said object and the kind of said 2D view and properties of other objects in said 3D model.

5   6.   The method according to claim 1,
wherein said predefined 2D representation of said object is used as a flat object when generating said 2D view.

7.   The method of claim 6,
10   wherein the position of said flat object is determined depending on at least one criterion taken from the group of criteria comprising the kind of said object and the kind of said 2D view and properties of other objects in said 3D model.

8.   The method of claim 1,
15   wherein said predefined 2D representation is subjected to an affine transformation when generating said 2D view.

9.   The method of claim 1,
wherein said object represents one of a part and a feature of a part and a group of
20   parts.

10.   A computer program product for execution by a computer for generating a 2D view of a 3D model, said 3D model comprising at least one object, said computer program product comprising computer instructions that cause said
25   computer to perform, for at least one object of said 3D model, the steps of:
-     testing whether or not a predefined 2D representation of said object is available for said 2D view,
-     if said 2D representation is available, using this 2D representation in said 2D view, and
30   -   if said 2D representation is not available, calculating a 2D projection of said object and using this 2D projection in said 2D view.

11. The computer program product of claim 10,

wherein the kind of said 2D view to be generated is taken into account when

testing whether or not said predefined 2D representation of said object is present.

5 12. The computer program product of claim 10,

wherein lines of said predefined 2D representation of said object are suppressed

in said 2D view in so far as said lines are hidden by said object or by other objects

of said 3D model, wherein the classification of a line as hidden or visible takes

place depending on at least one criterion taken of the group of criteria comprising

10 the kind of said object and the kind of said 2D view and properties of other objects

in said 3D model.

13. The computer program product of claim 10,

wherein lines of said object or of other objects of said 3D model are suppressed in

15 said 2D view in so far as said lines are hidden by said predefined 2D

representation of said object, wherein the classification of a line as hidden or

visible takes place depending on at least one criterion taken from the group of

criteria comprising the kind of said object and the kind of said 2D view and

properties of other objects in said 3D model.

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14. The computer program product of claim 10,

wherein said predefined 2D representation of said object is used as a flat object

when generating said 2D view.

25 15. The computer program product of claim 10,

wherein said predefined 2D representation is subjected to an affine transformation

when generating said 2D view.

16. An apparatus comprising at least one computer, said computer being

30 programmed for generating a 2D view of a 3D model, said 3D model comprising at

least one object, said computer being programmed for executing, for at least one

object of the 3D model, the steps of:

-        testing whether or not a predefined 2D representation of said object is available for said 2D view,

-        if said 2D representation is available, using this 2D representation in said 2D view, and

5   -   if said 2D representation is not available, calculating a 2D projection of said object and using this 2D projection in said 2D view.

17.   The apparatus of claim 16,

wherein the kind of said 2D view to be generated is taken into account when

10   testing whether or not said predefined 2D representation of said object is present.

18.   The apparatus of claim 16,

wherein lines of said predefined 2D representation of said object are suppressed in said 2D view in so far as said lines are hidden by said object or by other objects

15   of said 3D model, wherein the classification of a line as hidden or visible takes place depending on at least one criterion taken of the group of criteria comprising the kind of said object and the kind of said 2D view and properties of other objects in said 3D model.

20   19.   The apparatus of claim 16,

wherein lines of said object or of other objects of said 3D model are suppressed in said 2D view in so far as said lines are hidden by said predefined 2D representation of said object, wherein the classification of a line as hidden or visible takes place depending on at least one criterion taken from the group of

25   criteria comprising the kind of said object and the kind of said 2D view and properties of other objects in said 3D model.

20.   The apparatus of claim 16,

wherein said predefined 2D representation of said object is used as a flat object

30   when generating said 2D view.

21.   The apparatus of claim 16,

wherein said predefined 2D representation is subjected to an affine transformation when generating said 2D view.